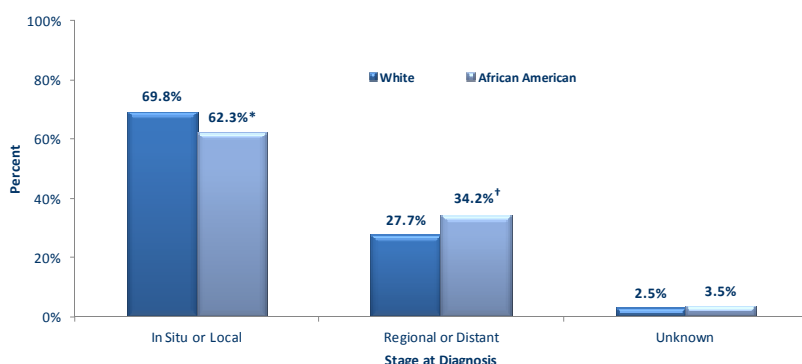




BREAST CANCER

BREAST CANCER is the second leading cause of cancer death, and excluding skin cancers, the most frequently diagnosed cancer among female Hoosiers, with about 4,400 cases diagnosed each year. African-American women are at increased risk for poor outcomes relating to breast cancer, in part, because they are more often diagnosed at a younger age, at a later stage of disease and with more aggressive forms of breast cancer (Figure 1). Breast cancer is rare among males. However, because males are prone to ignoring warning signs, they are often diagnosed at later stages and have poorer prognoses.

Figure 1. Percent of Female Breast Cancer Cases by Stage of Diagnosis and Race — Indiana, 2002-2011

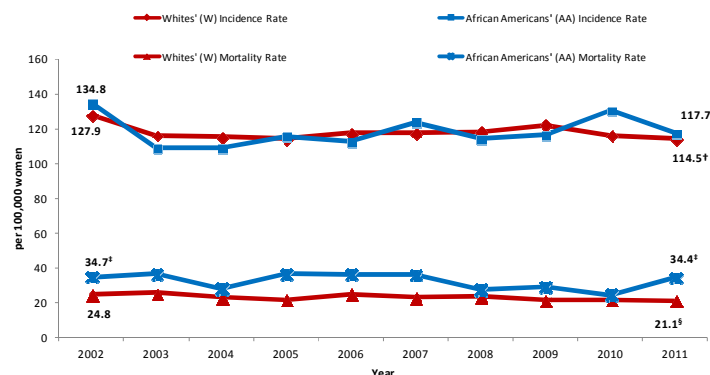


*Proportion of cases diagnosed in the regional or distant stage compared to the local stage was significantly higher ($P < .05$) among African-American females than among white females.

Source: Indiana State Cancer Registry.

SEX AND AGE are the two greatest risk factors for developing breast cancer. Women have a much greater risk of developing breast cancer than do males, and that risk increases with age. Overall in Indiana, the breast cancer incidence and mortality rates have decreased from 2002 to 2011 (Figure 2).

Figure 2. Female Breast Cancer Incidence and Mortality Rates Trends by Race* — Indiana, 2002-2011



*Age-adjusted.

†The breast cancer incidence rate among white females was significantly lower ($P < .05$) in 2002 compared to 2011.

‡Rate among African-Americans was significantly higher than rate among whites ($P < .05$).

§The breast cancer mortality rate among white females was significantly lower ($P < .05$) in 2002 compared to 2011.

Source: Indiana State Cancer Registry.

Who Gets Breast Cancer?

Sex and age are the two greatest risk factors. Some additional factors include:

- ❑ **Genetics** – Women who have had two or more first degree relatives who have been diagnosed with breast cancer have an increased risk. Additionally, breast cancer risk increases if a woman has a family member who carries the BRCA 1 or 2 genes, which account for five to 10 percent of breast cancer cases.
- ❑ **Race** – In Indiana, during 2007-2011, the breast cancer incidence rates for African-American and white women were similar, but the mortality rate for African-American women was 39 percent higher than for whites. This increased risk can partially be attributed to African-American women being diagnosed with more aggressive forms of breast cancer or at later stages.
- ❑ **Estrogen** – Women who started menstruation before age 12 or menopause after age 55 might be at increased risk as a result of a higher lifetime exposure to estrogen.
- ❑ **Pregnancy and breast feeding history** – There are studies that show that women who have not had children, had their first child after age 30 or have not breastfed might have an increased risk of developing breast cancer. According to the American Cancer Society, some research indicates that for each year a mother breastfeeds her child, her relative risk for developing breast cancer is reduced by 4.3 percent.
- ❑ **History of hormone replacement therapy (HRT)** – Using HRT can increase a woman's risk of developing and dying from breast cancer. This risk can be increased after just two years of using HRT.
- ❑ **Certain medical findings** – High breast tissue density, high bone mineral density and biopsy-confirmed hyperplasia increase a women's risk for developing breast cancer.
- ❑ **Alcohol Intake** – Having two or more alcoholic drinks a day increases risk by 21 percent.
- ❑ **Weight and exercise** – Gaining weight after age 18 and being overweight, especially post menopause, can increase your risk of developing breast cancer. The more body fat a woman has, the higher her estrogen levels typically are, increasing her risk of developing breast cancer.



Can Breast Cancer Be Detected Early?

Yes! Women should have frequent conversations with their health care provider about their risks for breast cancer and how often they should be screened. In general, women should follow these recommendations:

- ❑ **Breast Self Awareness.** Women in their 20s should be aware of the normal look and feel of their breasts, so that they can identify potentially dangerous changes.
- ❑ **Clinical Breast Exams.** Women in their 20s and 30s should have a clinical breast exam by a health care professional every three years. Women in their 40s should have yearly clinical breast exams.
- ❑ **Annual Screening Mammograms.** Women, beginning at the age of 50, should have yearly screening mammograms, which help detect cancers before a lump can be felt. Women between the ages of 40 to 49, especially women with a family history of breast cancer, should discuss the risks and benefits of mammography with their health provider to determine if it is right for them.

Be Aware! Common Signs and Symptoms of Breast Cancer

- ❑ Lumps, hard knots or thickening
- ❑ Swelling, warmth, redness or darkening
- ❑ Pulling in of the nipple or other parts of the breast
- ❑ Change in size or shape
- ❑ Nipple discharge that starts suddenly
- ❑ Dimpling or puckering of the skin
- ❑ Itchy, scaly sore or rash on the nipple
- ❑ New pain in one spot that doesn't go away

What Factors Influence Breast Cancer Survival?

- ❑ Staging of breast cancer takes into account the number of lymph nodes involved and whether the cancer has moved to a secondary location.
- ❑ When breast cancer is detected early, before it is able to be felt, the five-year survival rate is 98 percent.
- ❑ There are multiple treatment options available for breast cancer patients.
 - Mastectomies are the complete surgical removal of the breast.
 - Lumpectomies are the removal of only the cancerous area of the breast.
 - Local radiation can be used to treat the tumor without affecting the rest of the body.
 - Systemic drugs, which include chemotherapy, hormone therapy and targeted therapy, can be given orally or intravenously that reach cancer cells anywhere in the body.

GET INVOLVED: Join the Indiana Cancer Consortium (ICC)

- ❑ The ICC is a statewide network of over 100 agencies including the Indiana State Department of Health.
- ❑ ICC seeks to reduce the cancer burden in Indiana through the development, implementation and evaluation of a [comprehensive plan](#) that addresses cancer across the continuum from prevention through palliation.
- ❑ Become a member at www.indianacancer.org.

Community resources

- To learn more about the [Indiana Breast and Cervical Cancer Program](#), visit www.in.gov/isdh/24967.htm or call the Indiana Family Helpline at 1-855-HELP-1ST (1-855-435-7178).
- To learn more about the Breast Cancer burden in Indiana, refer to the [Indiana Cancer Facts and Figures 2012: Breast Cancer](#) report at www.indianacancer.org.
- To access a community toolkit, including resources and information, visit <http://indianacancer.org/breast-cancer-toolkit/>.

References

1. Indiana Cancer Consortium, Indiana State Department of Health and the American Cancer Society Great Lakes Division; *Indiana Cancer Facts and Figures 2012*. March, 2012. Available at <http://indianacancer.org/resources-for-indiana-cancer-consortium-members/indianacancerfactsandfigures2012/>. Updated cancer statistics are available online from the Indiana State Cancer Registry Statistics Report Generator at <http://www.in.gov/isdh/24360.htm>.
2. Indiana Cancer Consortium, Indiana State Department of Health; *Indiana Cancer Control Plan 2010-2014*. January, 2010. Available at <http://indianacancer.org/indiana-cancer-control-plan/>.